USAWC STRATEGY RESEARCH PROJECT

JOINT CAPABILITIES – THE CASE FOR REFORM

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ABSTRACT

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The Goldwater-Nichols Department of Defense Reorganization Act of 1986 legislated major organizational changes to improve the conduct of military operations and enhance joint interoperability among the services. The changes have had a profound effect on how the joint force operates, but they have been slower in taking root in the services' Title 10 function of equipping the force. In this function separate service approaches still dominate the procurement process, and establishing joint concepts and architectures to guide them has been glacial and acrimonious. These failures continue to hamper interoperability among the services and frustrate joint force commanders. Furthermore, they provide additional drag on an already cumbersome resource allocation process and warrant correction. This paper examines the causes of this continuing deficiency, and the current efforts within DoD to correct it including the newly established Joint Capabilities Integration and Development System. It further assesses those efforts as promising but insufficient, and provides recommendations on additional remedies to fully correct them including improving strategic guidance, empowering JFCOM and other combatant commands, reorganizing the Joint Requirements Oversight Council, and providing selected budget authorities to joint capability managers.

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JOINT CAPABILITIES – THE CASE FOR REFORM

The Goldwater-Nichols Department of Defense Reorganization Act of 1986 (GNA) legislated changes within the Department of Defense to enhance jointness and improve the nation's warfighting capabilities. The Act attempted to clarify command relationships, establish combatant command authorities commensurate with their responsibilities, and enhance interoperability among the different services. It provided a clearer operational chain of command from the national command authorities (NCA) to combatant commanders and provided them the authority to organize subordinate component forces to conduct successful joint operations.[1] Nevertheless, it left a training and equipping fault line between the military departments and their component commands that were now subordinate to the combatant commands. This bifurcated responsibility has not delivered an adequate level of jointness in the equipping function, and lessons learned during recent operations in both Afghanistan and Iraq underscore this weakness.[2]

Many familiar with the inner workings of the Defense Department know it continually struggles to identify, develop and fund joint requirements as inter-service parochialisms still dominate the planning, budgeting and procurement processes.[3] Recent internal changes initiated by the Department attempt to redress these deficiencies and build upon those implemented since the GNA. This paper analyzes these changes within the context of the intent behind the GNA, assesses that more organizational changes may be required to consistently acquire the joint interoperable equipment needed by our joint force commanders, and provides recommendations on how to more effectively achieve this.

HISTORICAL CONTEXT

Serious attempts to overcome interoperability problems predate the GNA, but service control of procurement dollars limits the change options. Control of the dollars allows them to compete individually to meet the nation's security challenges, thus advancing their own visions of the requirements needed to win on future battlefields. This control was established by Congress as it has the power "to raise and support armies, and provide and maintain a navy;" and exercises that authority by approving the President's budget submission and appropriating the money to the specific Departments.[4]

This has produced a process where the individual services advance solution sets to future capability gaps generally consistent with the Department's overarching security strategy; however, this strategy has often provided little more than generalized guidance to the Military

Departments.[5] This allows them to design their own solution sets with minimal oversight prior to integration at the Department level when it is very difficult to make substantive changes.[6]

This does foster a healthy competition of ideas among the services that remains important as DoD transforms itself for future operations, but service leaders are products of their unique cultures. Consequently, solution sets tend to promulgate core competencies that have enabled service success in the past. Visions of the future are more opaque, particularly in the 21st Century, and our joint processes have failed to cobble together a sufficiently detailed vision of required joint capabilities to shape the procurement of inherently joint assets;[7] thus further weakening any adherence to the strategic guidance issued.

As warfare evolved in the modern era air, land and sea firepower has become inexorably intertwined with ground maneuver making the whole greater than the sum of the parts.[8] This demands a level of interdependence that makes the services somewhat uncomfortable, and they tend to resist it unless it advances or protects their own institutional interests. The means for breaking these institutional paradigms lie in improving defense strategy for the new era, adequately defining joint concepts, properly empowering the combatant commands to voice required capabilities, and improving audits prior to and during execution.

PPBS

The first major attempt to program for such joint, interdependent systems came in the 1960s when Secretary of Defense (SecDef) McNamara implemented the Planning, Programming and Budgeting System (PPBS). He felt external pressure was necessary to get the military departments and Service Chiefs to look beyond their own interests to increase military capabilities overall. He provided guidance to the services that set priorities for programming, and established a program review to judge how well they responded.

He also had his staff provide alternatives, made major decisions himself, and then implemented the budget review to ensure his decisions got funded. The system improved programming within the Department and helped bring into focus needed trade-offs among service programs, but it failed to establish a foundation of joint capabilities as it sought to meld these programs into joint ones after development vice generate them from scratch.[9]

The PPBS remains DoD's primary system for linking national security strategy to specific programs. It attempts to achieve this through the careful application and methodical examination of the allocation of resources. It was

> "designed to facilitate fiscally constrained planning, programming, and budgeting in terms of complete programs – forces and systems – rather than through artificial budget categories."[10]

As such, it provides the SecDef a primary means to set and control the department's agenda, but it has faced tough challenges in successfully directing the services to recruit, train, and equip the forces needed to meet combatant command (CoCom) requirements. The Joint Requirements and Management Board (JRMB) was the Department's first effort to establish an organizational process to make requirement, technology and program decisions on joint capabilities.[11]

JRMB

A string of military debacles in the late 1970s and early 1980s demonstrated a lack of jointness in our organizations and equipment.[12] These failures, coupled with increasing pressure from Congress, provided necessary emphasis for the Joint Chiefs of Staff (JCS) and services to establish new organizations and processes to address them. The first reforms were based on the 1983 Defense Science Board Summer Study recommendations, and by March 1984 the Joint Chiefs of Staff established the Joint Requirements and Management Board (JRMB) to

> "monitor the development and acquisition of joint programs; evaluate potential joint military requirements; identify, evaluate, and select candidates for joint development and acquisition; oversee cross-service requirements and management issues; and resolve service differences arising after initiation of joint programs."[13]

The membership of the board comprised the Vice Chiefs of the Services and the Director, Joint Staff. It attempted to reduce duplication and meld separate service programs into joint requirements, and it began the process of getting senior military members involved in identifying, defining and resourcing joint requirements. In 1986 it was renamed the Joint Requirements Oversight Council (JROC).[14]

JROC

The JROC served as an early advocate for increasing jointness among the services. The GNA required the Chairman, Joint Chiefs of Staff (CJCS) to advise the SecDef on requirements, programs and budgets and provided him a Vice Chairman (VCJCS) to assist him in this and other roles. It stipulated the CJCS assess military requirements for defense acquisition programs, prioritize requirements identified by combatant commands, and submit alternative program recommendations and budget proposals to achieve greater conformance with the priorities established.[15] The Chairman used the JROC to help manage these functions, and in 1987 he named the VCJCS its permanent Chairman and explicitly assigned these tasks to the JROC in its original charter.[16]

The JROC's key role in these early years was to provide initial judgments about which requirements should enter the acquisition process. It had the authority to defer or prevent acquisition of major equipment that had implications affecting more than one service. In this manner it was more influential than its predecessor, the JRMB, that had largely served as an information clearinghouse acquainting senior military members of one service with the acquisition requirements of another.[17] Its functional organization and lines of responsibility are depicted in the following chart.

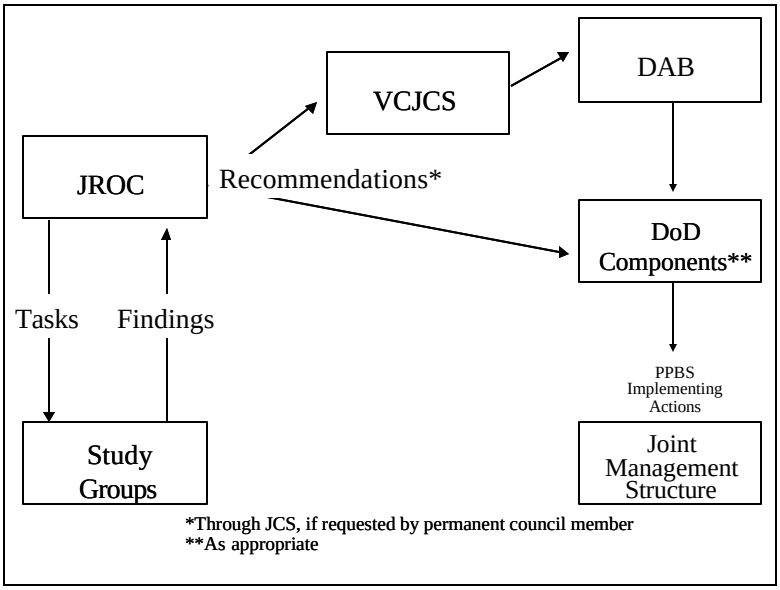

FIGURE 1. ORIGINAL JROC PROCESS CHART[18]

The first VCJCS, GEN Herres, oversaw the development of the original JROC charter that institutionalized the role of the military in setting joint requirements. He established the authority for the VCJCS to screen items prior to presentation to the Council, and allowed the Council to rule on potential military requirements following discussion. But the JROC did not try to frame new military requirements on their own at this stage, nor did they disapprove many of the proposals sent to them from the services or combatant commands.[19] The first to attempt this was the second VCJCS, ADM Jeremiah, who advocated the JROC become the proponent of the systems that maintain America's military edge.

Rather than reacting to initiatives from the services, ADM Jeremiah envisioned the JROC becoming an active agent in setting the future orientation of the military. But dwindling

budgets in the early 1990's left little room for widespread cooperation in retooling service programs. The Chairman's Program Assessment (CPA), his principle means of grading the services' "homework" in meeting joint requirements, had largely become a de facto acknowledgement and endorsement of the separate service programs.[20]

In 1994 ADM Owens became the third VCJCS, and during his tenure he significantly changed how the JROC analyzed and defined joint requirements by providing new mechanisms to enforce inter-service program discipline. The timing was ripe for reform in the mid 1990s as acquisition budgets were tight and operational requirements in the post cold-war era continued to expand in new and unexpected ways.

The revolution in military affairs, enabled by technological advances, also provided new opportunities to redesign the joint force for the future.[21] To address these factors ADM Owens imposed reforms on the JROC similar to those he had used in the Navy to get their competing submarine, warship and aviation communities to integrate their research, development and procurement initiatives when he served as the Navy's modernization chief.[22]

The challenges were greater in the joint community, but his four-pronged approach revamped the importance of the JROC and directly linked its output to the department's central decision-making process, the PPBS.[23] First, he increased by 10-fold the amount of time the JROC met to discuss joint military requirements. This had the effect of forcing the Vice Chiefs to understand the details of the nation's military requirements and to put those needs in a joint perspective.

Second, he linked the JROC's work to a robust dialogue with the unified commanders. He established regular meetings with them and conducted semi-annual trips to every combatant command headquarters to share information and gather joint requirements.

Third, he established an analytic basis for program evaluation known as the Joint Warfighting Capability Assessment (JWCA) process. This process provided assessments across nine-crosscutting warfighting areas where revolutionary concepts and major procurement initiatives could be examined and discussed in a joint context. Each area had a joint staff proponent and membership that included combatant command, service and defense agency representatives, but they operated outside normal staffing processes and provided ideas unencumbered by consensus requirements.[24]

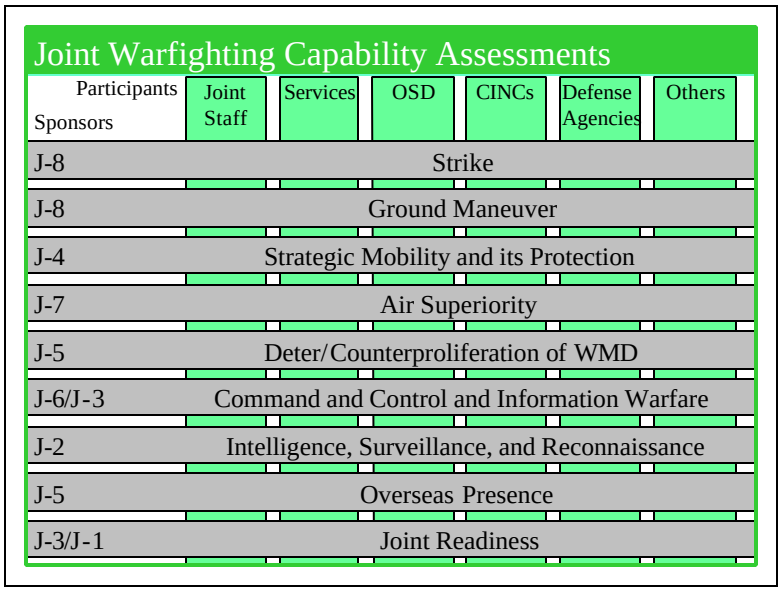

FIGURE 2. ORIGINAL JOINT WARFIGHTING CAPABILITIES ASSESSMENT DOMAINS

He used the JWCAs as innovation engines to provide analytical insights to JROC members in order to stimulate discussion and lead the JROC to objective recommendations on joint military requirements. He felt the objectivity of such analysis would provide the means to reduce duplication and increase interoperability, and thereby provide additional means to fund his revolutionary vision of a system of systems that he sought to underwrite.[25]

Finally, he used the JWCA process and its analysis to link the JROC to the Department's central decision-making process, the PPBS. He achieved this by leveraging the results of the JROC's dialogue with unified commanders and the JWCA analysis to improve the CPA by giving it greater weight, validity and importance as an effective evaluation tool of service programs. In turn, this would provide the SecDef a firmer analytic baseline to modify the service POMs.

ADM Owens also introduced a new document at the front end of the PPBS to help influence service choices before they built their POMs. This document, known as the Chairman's Program Recommendation (CPR), had the effect of providing early warning to the services on programs and requirements the CJCS would later expect to see in their POMs, and if they were not, he could recommend their addition during the CPA. [26] The chart below shows how the process worked, and although it failed to provide a rigid enforcement mechanism, it did

broaden the dialogue and open the entire requirements determination and programming process to earlier joint review and scrutiny.

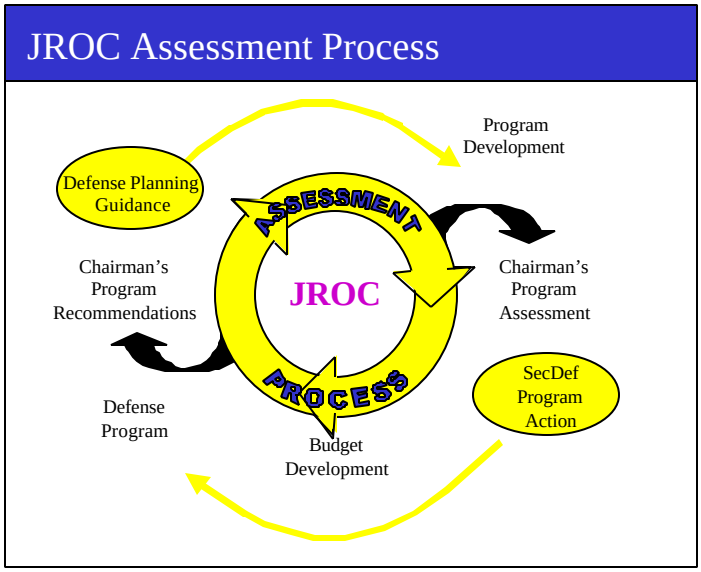

FIGURE 3. JROC ASSESSMENT PROCESS

His efforts expanded the scope and authority of the JROC by increasing the time senior leaders dedicated to studying requirements, increasing the dialogue with combatant commands, initiating an analytic framework for decision making with the JWCAs, and increasing the credibility of the CPA. These contributed to improving the requirements validation process, yet failed to provide permanent solutions to the interoperability problems.

Many of these efforts initially worked outside normal staffing channels, and therefore, provided the VCJCS the means to expedite solution sets. Nevertheless, the services used traditional gaming methods, workarounds, and compromises among themselves to slow the process and protect their institutional interests. It was so bad ADM Owens remarked after retiring, "I would not have the services do requirements any more. They can't do them…they have not been able to see systems and equipment in a joint perspective."[27]

In 1996, ADM Owens, frustrated by the glacial pace and widespread resistance to his initiatives for change, resigned after only one tour as VCJCS.[28] Despite this, his efforts highlighted the JROC's potential in resolving redundancy and interoperability issues, and the National Defense Authorization Act of 1996 provided the JROC statutory authority when it

became law on 31 January 1997. The act provided explicit authority for the JROC to assess joint military requirements, consider alternatives to acquisition programs, and assign joint priority among programs reflecting resource levels projected by Defense Planning Guidance (DPG).[29]

This was an acknowledgement by Congress that GNA failed to meet their intent in the equipping function, but that a strengthened JROC might. It explicitly allowed the JROC to continue to function, and subsequent reforms internal to DoD have allowed the JROC to improve its means in achieving these statutory functions.

Yet, as mentioned, persistent interoperability problems demonstrate that it still falls short in fully integrating joint requirements prior to system development. Examples during Operations ENDURING FREEDOM and IRAQI FREEDOM include fratricide prevention, communications and data-linking shortfalls, just to name a few.[30] A fair question is whether improvements within the JROC process are bringing it closer to resolving these interoperability problems. The answer appears to be a guarded yes, but they may not fully resolve them. The JROC charters, beginning with the original one, highlight these efforts and provide a sound basis for analyzing the additional reforms that may be needed to fully resolve the equipping problem.

INSTITUTIONAL REFORMS

Revisions of the JROC charter highlight a series of incremental changes designed to bring about coherence in joint procurement. The current charter requires the council to

> "Oversee the requirements generation process, review major defense acquisition programs, formulate programmatic advice and alternative program recommendations, serve as the link between the services and combatant commands and OSD on joint warfighting capability issues, and oversee the Joint Warfighting Capability Assessment (JWCA) process."[31]

In previous charters, dating back to the original JRMB, each sought to provide the organizational capacity to examine potential military requirements and select the proper candidates for joint development and acquisition.

The JROC inherited a process where service solutions were at the van, and its initial mission became reducing redundancies among them and encouraging interoperability. The long-term goal established by the original chairman has been to generate joint requirements from scratch ensuring interoperability among all systems.[32] This fundamental goal has not changed, and within each successive JROC charter one sees a steady evolution toward it. Examining these is very instructive in highlighting why it still has difficulty fulfilling this fundamental purpose.

Successive reorganizations have either changed the format for achieving decisions or added organization structure below the JROC such as the JWCA panels, the Joint Requirements Board (JRB), or the Joint Requirements Panel (JRP) to analyze and resolve joint issues earlier in the process and at lower levels. The JROC's primary mission in its original charter was to validate joint requirements while ensuring interoperability. The first two charters employed a voting system to decide controversial issues, and allowed dissenting opinions to go to the CJCS for decision in consultation with the JCS.[33] In other words, really tough requirements' issues were decided by the JCS; and to prevent this, oftentimes the services learned to accommodate each other's perceived critical requirements.

This system, colloquially known as "logrolling," has persisted to this day. To undermine this collegial accommodation and enforce tougher trade-offs, the September 1990 Charter eliminated the voting system and granted complete decision authority to the JROC Chairman, the VCJCS.[34] Dissenting opinions were still promulgated to the CJCS by the VCJCS for arbitration, but this increased the VCJCS's power over the joint requirement's process in a manner similar to how the GNA increased the CJCS's power over the JCS. This change resulted in part from intervention by the Congress that voiced serious concerns with JROC organizational structure and continued failures to achieve jointness in the equipping area.[35]

The end of the cold war brought increased scrutiny for realizing efficiencies, and by 1995 ADM Owens sought to institutionalize real change by adding rigor to the analytic process. The February 1995 Charter provided a formal role for the JWCAs by offering analysis that would make logrolling even more difficult to support. It also added new rigor to the requirements generation and mission needs process by requiring JWCA analysis and JROC review prior to acquisition milestones and service POM builds.[36]

This strengthened corporate military oversight of individual service acquisition requirements and provided the JROC opportunities to increase interoperability in the early stages of approving requirements. Furthermore, the addition of the CPR and the strengthening of the CPA allowed the CJCS to more effectively "grade" the service POMs; thereby providing the SecDef with an analytic basis when making the tougher decisions.

In 1994 and 1995 the CPA's did recommend significant dollar shifts from programs that failed the needs test,[37] but this has been hard to sustain. Overall, these efforts sought to link military requirements to the national military strategy, but external pressures and internal personalities have enabled inconsistencies among priorities and programs to persist.

To help the JROC overcome this and make better-informed and more strategic level decisions, the May 1997 and March 2001 Charters each established a direct support sub-panel,

the JRB and JRP respectively. [38] These elements provided organizational structure below the JROC to screen programs, requirements and mission needs before raising the issues to the JROC for decision. This effectively allowed more staffing time to facilitate compromises at lower levels, better prepared the JROC members to make tough decisions in a more informed manner (based upon the analysis provided by their own staffs), and allowed them to focus more on the strategic level issues.

The JRB consisted of 2 star representatives from each of the services and was chaired by the J-8, a three star. The JRP consisted of O-6 level representatives from each of the services and was chaired by the Deputy J-8 for Resources and Requirements. Decision authority rested with the Chair as it does with the JROC; although, issues without broad service consensus rarely advanced through these screening boards to the JROC for resolution.

The JWCA teams continued to support these processes, and consensus for change began to be built at lower levels. Also, this further inserted the JROC into the acquisition process by giving them more oversight during milestone zero (before Research Development, Test & Evaluation [RDT&E] gets authorized by the Defense Acquisition Board [DAB]), and helped lay the groundwork for the current efforts that seek to make programs joint from their inception. The chart below, from the Joint Staff J-8, shows how the JROC decision process operated in 2001.

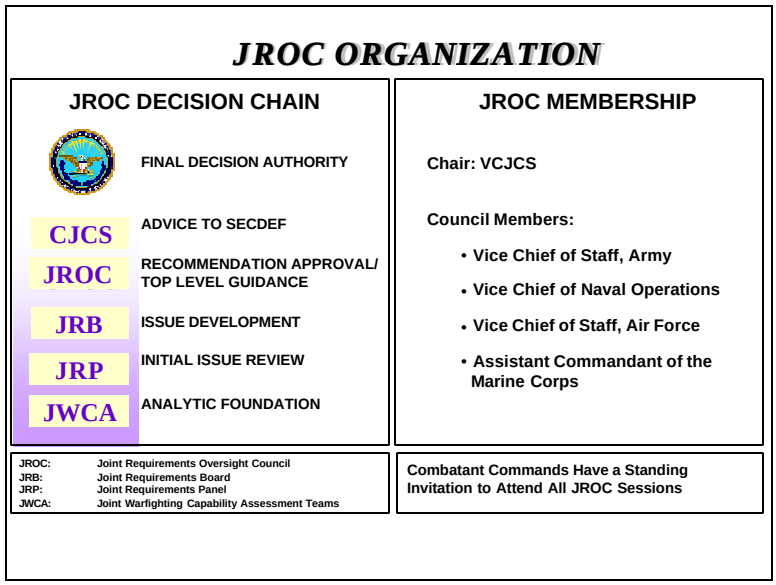

FIGURE 4. JROC MEMBERSHIP AND DECISION CHAIN (2001)

While on the one hand these efforts have forced joint decisions to occur at lower levels, they have also allowed traditional staffing mechanisms to creep back into the JROC process. This staffing process has the potential to result in logrolling that rounds the edges on tough issues and dilutes the forcefulness of JROC decisions. This has been offset by the broadened scope of the current charter that more directly links requirements to strategies, but its long-term effectiveness is difficult to substantiate.

An interesting factor in all of these evolutions; however, is that they challenge Secretary McNamara's notion that the various Departments cannot achieve trade-offs among their programs. Discussion and analysis earlier in the process allows compromises that tend to limit items needing full JROC attention, and this helps push jointness to lower levels by identifying interoperability issues prior to resourcing. Trade-offs are being made, but the toughest decisions still require resolution at department level, and this system provides limited capacity to force the services to fundamentally align their requirements and acquisitions programs with a joint vision of future warfare.

In other words, the process constantly tries to make something function jointly after it has been designed rather than developing and validating joint concepts and requirements up front. The current charter purports to do this, as it seeks to strengthen the JROC's strategic focus even further by more effectively linking requirements to strategy. The current changes are being fostered by a realization that the "JROC needs to take more initiative in identifying capability gaps and finding solutions…and be the driving force in obtaining those specific goals."[39]

CURRENT EFFORTS

The latest effort to reform this process consists of several ongoing initiatives, and it is too early to determine their final impact. Some of the changes appear promising, but processes are difficult to reform once deeply ingrained in bureaucratic structures.

The genesis of the latest effort may well have grown out of Secretary Rumsfeld's frustration in failing to acquire significant concessions from the services to support the new strategy developed during the Quadrennial Defense Review (QDR) in 2001.[40] Consequently, he forced the department to develop a new process where joint operations concepts are derived from strategic objectives coming out of the Defense Planning Guidance that subsequently shapes service procurement initiatives.[41]

Within this operating framework, OSD could use the JROC to ensure service procurement initiatives comply with the overarching vision of how the joint force would fight 15 to 20 years in

the future. In theory, this would provide a top down, strategy driven process to transform the Requirements Generation System (RGS) into a Joint Capabilities Integration and Development System (JCIDS) that ensures capabilities are born-joint. But theory and practice are different, and this has been difficult to implement given the current structures and processes in place. A graphic depiction of the desired process is provided below by the Joint Staff, J-7.

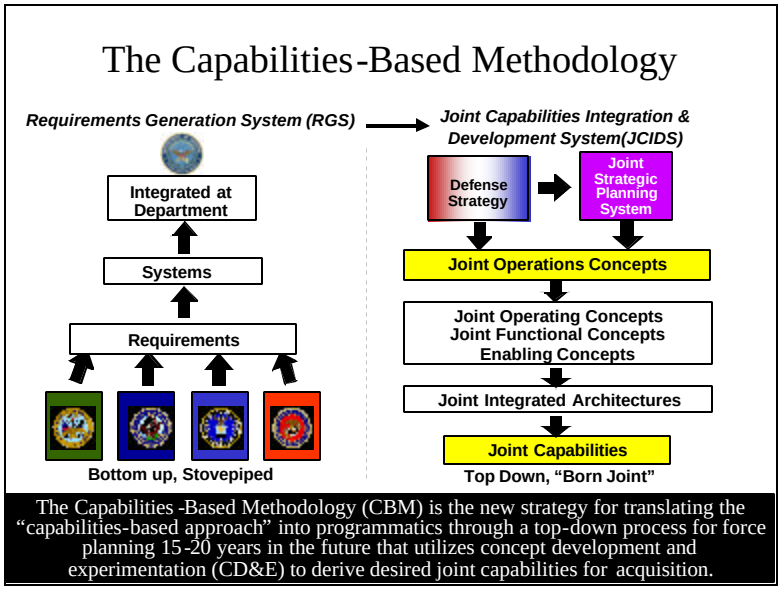

FIGURE 5. CAPABILITIES BASED METHODOLOGY

JOINT OPERATIONS CONCEPTS

To implement this methodology the CJCS first needed to develop an agreed upon vision of how the joint force would operate 15 to 20 years in the future. This document, titled the Joint Operations Concepts (JOpsC), would provide capstone guidance on the core capabilities and attributes needed by the joint force and shape the development of more specific operating and functional concepts. These supporting concepts would form the foundation of joint architectures to measure future joint program recommendations. After 16 months the CJCS finally produced a JOpsC the Secretary would sign; and although many familiar with the process knew it lacked the detail he desired, he approved it since it would be annually updated.[42]

This delay was due in part to a desire by the services to keep the document focused broadly like the defense strategy to preserve their particular contributions to the warfight and partly by DoD's extensive staffing process. These combined to limit the document's ability to set

forth a bold vision of future capabilities, attributes and concepts needed to succeed in future warfare.[43] Consequently, the initial draft was rejected by the JCS in February 2003, and they asked for a rewrite to ensure the document provided more specific actionable guidance. The final product now includes the core capabilities of the joint force, but still lacks a complete description of how the joint force operates.[44]

Meanwhile, the JROC directed the concurrent development of joint operating concepts (JOCs) that describe the tasks or missions the joint force must accomplish and joint functional concepts (JFCs) that describe the collection of functions to accomplish the tasks. The definition of these concepts would provide more specific guidance to shape acquisition initiatives, but no effective integration method has been developed to ensure appropriate relationships among concepts are maintained.

The chart below, provided by the Army Staff G-3, describes the relationships among these concepts and how they lead to developing joint integrated architectures. But the draft concepts compiled by September 2003 "failed to provide clear definitions of the 'how' of the concept, or the capabilities required to implement it."[45] Without this, it is very unlikely these concepts will ever provide the basis necessary to develop interoperable equipment sets.

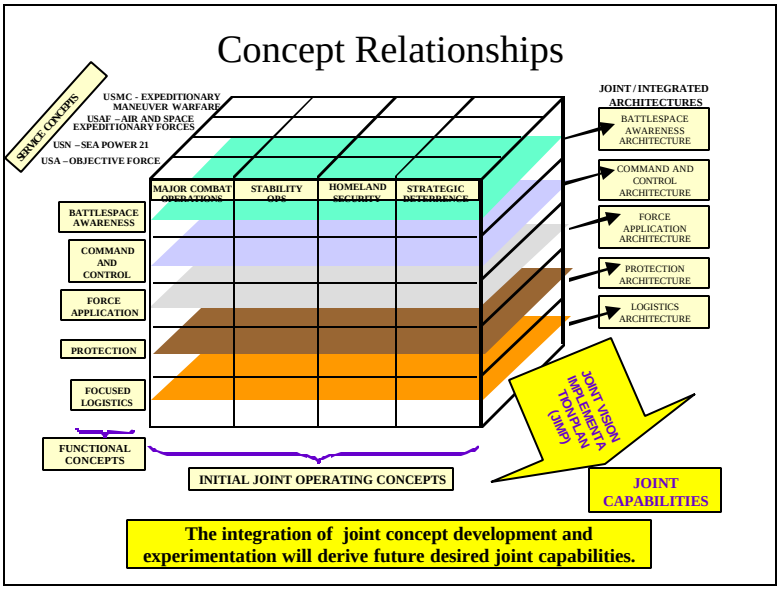

FIGURE 6. JOINT OPERATIONS CONCEPTS AND RELATIONSHIPS

Consequently, the JROC directed the subsequent development of joint integrating concepts (JICs) to aid them in determining warfighting needs within the capabilities-based approach. These concepts would be more focused than operating and functional concepts, define specific tasks to be conducted, and bridge the gap between how we want to fight and the capabilities we need. Examples include urban operations, global strike operations, and forcible entry operations.[46]

Notwithstanding the confusion caused by this shifting focus on various concepts and their roles, the draft rewrite of the JROC charter already defines new organizations to manage the processes that develop our future requirements. The focus of the rewrite does place new emphasis on capabilities as the single driver of the improved procurement validation system; however, many of these entities that manage the process appear to change in name only.

JOINT CAPABILITY INTEGRATION AND DEVELOPMENT SYSTEM

CJCSI 3170.01C defines this new process called the Joint Capability Integration and Development System (JCIDS), but it employs many of the vestiges of the former system. For example, the Joint Requirements Board (JRB) is now renamed the Joint Capabilities Board (JCB), but its membership and tasks remain largely unchanged. Additionally, the Joint Requirements Panel (JRP) is now called the Functional Capabilities Board (FCB) and the JWCAs are now called Functional Work Groups (FWGs), but only the membership changed. The tasks and responsibilities assigned to these new groups are not substantively different from those laid out in the JROC Charter in 2001.[47] The chart below shows the new JROC decision chain, and even it looks remarkably similar to the 2001 version.

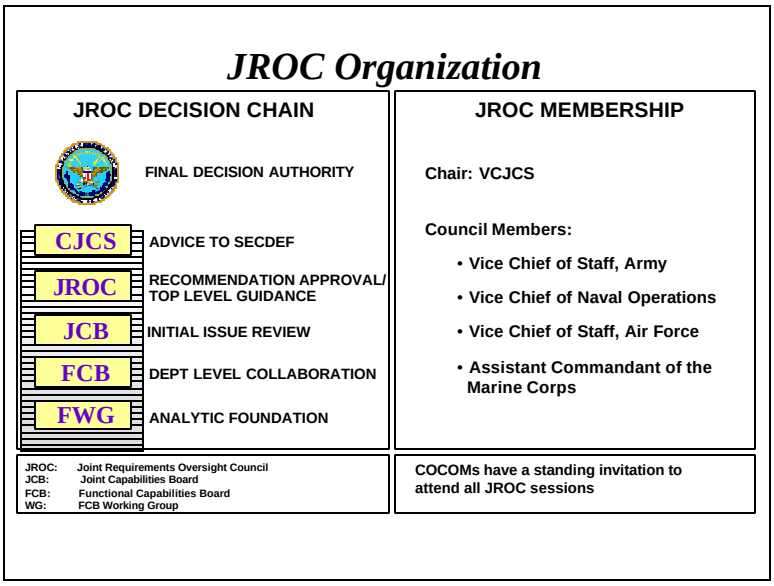

FIGURE 7. JROC MEMBERSHIP AND DECISION CHAIN (2003)

In fairness, the new JCIDS process attempts to move the Department away from mission needs statements (MNS) that tended to be platform oriented toward a capability driven procurement process that seeks to acquire broad joint capabilities needed to win under conditions of uncertainty. These efforts are concurrent with the acquisition and business reforms being implemented across the Department. These reforms are necessary, as they currently take too long, cost too much, or are incompatible with modern technology cycles.[48]

The recognition of this problem caused the Deputy Secretary of Defense, Paul Wolfowitz, to recommend suspending and rewriting key procurement documents last fall (the DoD 5000 and CJCSI 3170 series) highlighting the importance the administration places on these reforms.[49] The rewrites produced documents that emphasize capabilities vice needs. They also establish critical linkages between JROC and DAB decisions at Milestones A, B, and C.[50]

This allows the JROC to formally play an even larger role in shaping and influencing DAB decisions, and continues the trend of pushing downward the joint reviews by creating a new entity known as the gatekeeper (the Deputy J-8) that assigns the initial joint potential designator.[51] This entire effort gets closer to fulfilling the desire to have the program decisions and necessary trade-offs reviewed and decided by senior military members that McNamara thought impossible, but it still faces many challenges as the concepts it depends upon have not

been finalized. The following chart shows how this new process would strengthen the JROC's role in DAB decisions provided the concepts and integrated architectures get properly developed.

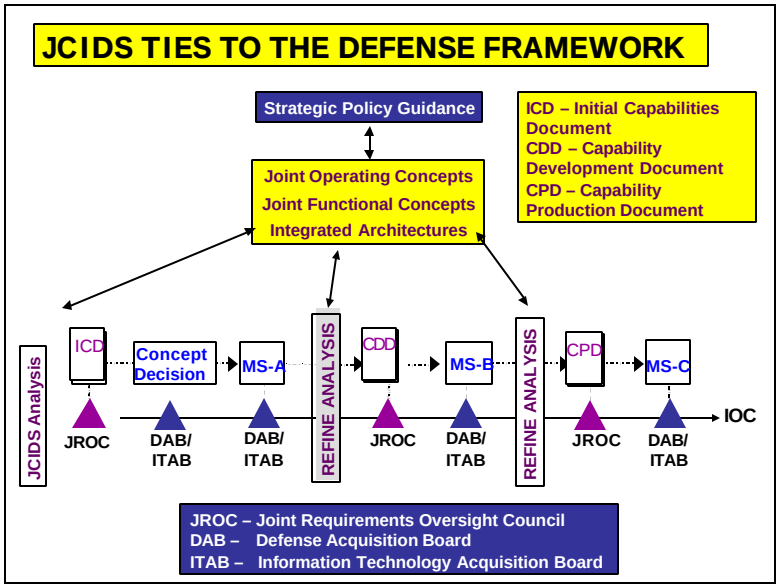

FIGURE 8. JCIDS PROCESS AND ACQUISITION DECISIONS[52]

The rewrites of the acquisition directives are augmented by an additional reform effort known as the Joint Defense Capabilities Study, or colloquially as the Aldridge Commission. This Study produced recommendations in October 2003 and a final report in January 2004 that attempt to improve the development and role strategic guidance plays in this process, as well as corporate oversight during execution.[53] The recommendations from a decision briefing to the Senior Leader Review Group (SLRG) in October 2003, subsequently codified in implementing guidance from SecDef on 31 Oct 2003, provide a number of potentially promising changes.

These include establishing oversight of the JCIDS process by a Strategic Planning Council (SPC) consisting of the SLRG principals plus combatant commands and chaired by SecDef. The SPC serves as a corporate board of directors that

> "drives strategy and frames major planning issues, reviews joint needs and solutions to ensure congruency with strategy, and assesses feedback on execution performance."[54]

The chart below, published in the final report, depicts this new process.

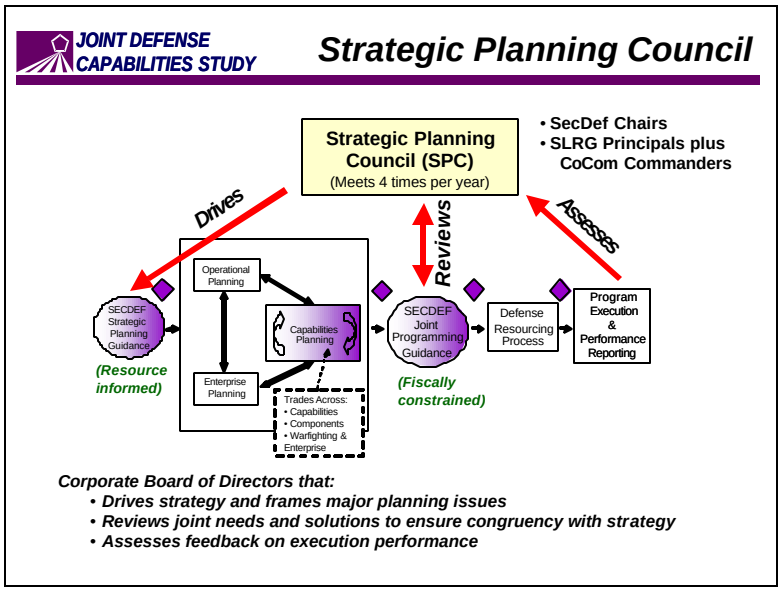

FIGURE 9. JOINT CAPABILITIES DEVELOPMENT PROCESS

The SPC is scheduled to meet four times a year and drives a new resource informed document at the front end of the requirements process known as the Strategic Planning Guidance (SPG). This guidance informs an enhanced planning process that incorporates JCIDS processes and provides Joint Programming Guidance (JPG) that is fiscally constrained for the SPC to review and approve. This results in resourcing and begins the program execution that, in turn, the SPC also assesses.

This process is designed to improve corporate oversight, strengthen the various strategy and programming documents, and provide improved opportunities to make joint capabilities the central part of defense planning and programming. Nevertheless, the entire process still relies on many of the same characteristics that limit the department's ability to make substantial changes such as inclusive participation by all of the stakeholders, exhaustive staffing processes, and the yet to be developed concepts and architectures.[55] Additionally, the structural changes it advocates are so limited they may lack the strength to constrain the services' abilities to protect their institutional interests,[56] but it remains too early to tell what the long-term impact of this effort will be.

JOINT BATTLE MANAGEMENT COMMAND AND CONTROL BOARD

Another Secretary Rumsfeld initiative attempts to improve the interoperability of Joint Battle Management Command and Control (JMBC2) systems. To achieve this the SecDef assigned JFCOM, an independent joint command, the responsibility for establishing JMBC2 requirements for the joint force. Using a Management Initiative Decision (MID 912) he assigned JFCOM the authority to "review and approve all JMBC2 requirements and system-of-systems capability requirements ensuring integration and interoperability of JBMC2 capabilities prior to them entering the acquisition process."[57]

In this role, JFCOM leads JBMC2 mission and capability area requirements that include concepts, integrated architectures, systems interoperability and integration efforts, training and experimentation to guide future systems acquisitions.[58] JFCOM also serves as the joint force trainer, integrator and executive agent for experimentation to help inform the development of these requirements.

JFCOM's new JMBC2 authorities promise to constrain service choices, but the structure used to implement them may lack the independence needed to fully resolve the existing tension between service programs and joint requirements. To implement this new authority JFCOM established a board of directors (BOD) empowered to approve the standards and architectures needed for command and control across the joint force, but the services, as members of the BOD, are helping to write and validate them.

This provides them significant flexibility in both designing and resourcing the requirements. It does preserve what many see as a healthy competition among the services, but it allows the architecture design and the prioritization of resources to remain under the services' purview. This provides them virtually the same ability to shape future requirements and acquisitions as those they use today.

As part of the effort JFCOM requested and received limited procurement authority to field selected command and control capabilities immediately needed by the combatant commands, but not in sufficient quantities to cause the services to restructure or re-direct their own C2 procurements overall. This limited procurement authority provides only short-term, niche solutions to the most pressing problems, and still allows the services to resource and maintain the preponderance of C2 equipment fielded across all of the combatant commands. Based on these factors and its lack of organizational capacity to enforce the alignment of service priorities to joint requirements, it is unlikely the JBMC2 authority will fully resolve C2 interoperability challenges.

REFORM TRENDS AND SHORTFALLS

Each of these efforts attempts to resolve the lingering lack of jointness in the equipping function. The JROC's development of organizations such as the JWCAs, JRP and JRB help provide it analysis of proposed requirements to support joint decision-making. The emergence of joint concepts provides a framework to develop joint capabilities and architectures, and the recent reorganizations into FWGs, FCBs and JCB attempt to further improve the analysis and structure that supports JROC decisions.

Aligning the FWGs with associated functional concepts provides analysis of joint operating concept requirements across the spectrum of conflict, and appointing FCBs to manage each area provides a more department-wide look at a higher level (O-7 vice O-6 previously) than the JRP provided. However, this appears suspiciously like a symantics game since the fundamental joint process has not changed and the FCBs remain managed by the JS directorates (except for C2 which went to JFCOM).[59]

FCB membership has expanded beyond the JS and services to include combatant commands, OUSD (AT&L), DPA&E, OASD NII/CIO, DIA and other agencies as required; but expanding a group's size rarely results in improved efficiency. The FCBs provide additional scrutiny, but lack the organizational capacity to alter service behavior; and since each of the primary stakeholders has access to the process, it is unlikely that it will provide lasting change to the service-centric process for developing joint capabilities.

The changes OSD introduced attempt to improve strategic guidance and oversight of programming choices. They also provide JFCOM the authority to manage the JBMC2 enterprise, but will any of this succeed in resolving the fundamental dilemma of separate service approaches to defining their warfighting requirements and capabilities?

While the JROC reforms and JOpsC hierarchy improve the potential to resolve interoperability problems earlier in the process, neither guarantees the emergence of a new era where capabilities are born joint. The entire process remains mired in monitoring service initiatives vice fostering new joint initiatives that might eventually turn this tide.

The JOpsC, in theory, provides the basis for the potential emergence of born joint capabilities. As an operational level concept it could provide a broad description of how the joint force operates, and from this the supporting joint operating concepts could describe their contributions to accomplishing particular tasks or missions that collectively define the range of military operations. Likewise, joint functional concepts could integrate these sets of tasks to define the joint capabilities needed across the range of military operations; thereby leading to

the development of joint architectures that illuminate the interoperability requirements of the future force.

These requirements would be defined by their joint characteristics and would be assessed for their contribution to the joint warfight prior to procurement. But the approved JOpsC and supporting draft operating and functional concepts fail to provide sufficient detail for an adequate description of derivative capabilities needed by the joint force, and this has led the JROC to request the development of perhaps as many as 20 joint integrating concepts (JICs) like urban operations, global strike operations, and forcible entry operations to help provide this.[60]

The lack of detail was due in large measure to the manner in which the original concepts were written. The staffing process allowed the services to limit details that might jeopardize their institutional priorities or core competencies. This process remains intact while developing the integrating concepts, and this fails to raise one's optimism. But Secretary Rumsfeld's personal attention on this matter, coupled with the expected annual reviews and updates, may begin to improve the content of these concepts.

To be effective, an operational concept must describe how the joint force accomplishes the tasks assigned. It is

> "the 'Aha!' idea that answers the question 'What is the current problem of warfare, and how do we solve it?' [It] is an image of combat: a concise visualization that portrays the strategic requirement, the adversary and his capabilities, and the scenario by which that adversary will be overcome to accomplish the strategic requirement. It is a governing idealization that addresses those activities necessary to link tactical activities in a purposeful way to address the goals of strategy."[61]

It is not difficult to see how one could derive the necessary attributes and characteristics the joint force would need should such a conception of war exist. But in today's context the adversaries move in shadows and fight asymmetrically making a concise visualization challenging and elusive, but nevertheless necessary.

It has been over 20 years since the Army published its last clear, overarching concept for joint warfare. It was called AirLand Battle doctrine and was based upon securing or retaining the initiative and exercising it aggressively to defeat the enemy. In its joint application, the AirLand Battle operational concept encouraged commanders to see and attack deep with all available resources to break-up the tempo of the attacking forces by using the joint capabilities of both land and air forces.[62]

The Army was able to derive from this description of warfare a set of capabilities necessary to win. This resulted in the subsequent fielding of the Abrams main battle tank,

Apache and Blackhawk helicopters, Multiple Launch Rocket System and Advanced Tactical Munitions System, and a suite of improved munitions for each of these weapons platforms. The Army also reorganized its forces into mobile combined arms teams and revamped its training and leader development strategy. Likewise, the Air Force made adjustments to equipment priorities to provide the BAI and CAS to support the fluid warfight occurring on the ground.[63]

The JOpsC does not provide this level of direction, and without it the services will continue to have the maneuver space to develop their own solutions to the requirements problem. This will continue to produce redundancies and hamper interoperability. A lack of coherence among the concepts also remains problematic as the joint staff and JROC must find an integrating mechanism to ensure JOCs, JFCs, and JICs interoperate. The DART review found poor correlation among various concepts since eight different writing teams produced them.[64]

The strategic guidance that governs operational employment and programming decisions is also written without the detail necessary to make but the most generalized assessments of service programs. This has been the case with both the National Military Strategy (NMS) and the Defense Planning Guidance for many years.[65] In the case of the former, the current SecDef even questioned the requirement for such a document and tabled the draft the Joint Staff coordinated with the services and prepared for his signature last year.

One reason he cited for this decision was that DoD has published too many documents that do too little and conflict with other documents that already describe our strategy such as the QDR or NSS.[66] His decision had to be reversed last fall as the National Defense Authorization Act stipulated the publication of a NMS, and the Department is currently looking at updating QDR 01 to meet the suspense, reworking the QDR entirely, or asking Congress to wait until QDR 05 is completed.[67]

This highlights the difficulty the Department has in translating strategic guidance into programs, and the cancellation of an update to DPG 04-09 underscores this. The original document tasks numerous studies, but provides little in terms of enforceable programming decisions.[68] Part of this is due to normal staffing processes that allow services to rework language in the document to their liking, which usually reduces the Department's ability to enforce hard programming decisions.

The natural question arises of whether any of the major Department wide reform s initiated by the Aldridge Commission will have lasting impact. The findings being implemented call for the formulation of fiscally informed guidance (SPG), an enhanced planning process that presents major issues to the SecDef for decision, and results in fiscally constrained guidance

(JPG) that concludes with an integrated program/budget build that is fully responsive to the SPG and JPG.[69]

In the implementing memo the SecDef highlights that some organizational changes may ultimately be needed, but attempts to initiate the changes within the structures existing today. Expecting new processes to take root without associated institutional structure raises the risk of failure. Additionally, each of these processes allows the primary stakeholders to fully participate within it, and it is hard to imagine how they could fail to protect their institutional interests in this context. While there is not sufficient evidence to reject these efforts out of hand, it does not appear likely that the JCIDS process, the JOpsC family of concepts, nor the renewed emphasis on department level leadership and guidance will fully resolve the equipping problem.

ALTERNATIVES

There are at least three alternatives that may more effectively solve the problem of developing born joint capabilities. These include empowering JFCOM to develop these capabilities, empowering the other combatant commands to have a stronger role in developing them, or by establishing entirely new joint entities to oversee joint capability procurement within particular capability domains. Let us look at these options to further assess their potential.

EMPOWERING JFCOM TO DEVELOP REQUIREMENTS

Empowering JFCOM to improve the Department's ability to develop and field interoperable equipment can be achieved by making them the joint doctrine and capabilities center for the joint force or providing them operational control (OPCON) over service acquisition accounts or Program Elements (PEs).

Joint Doctrine and Capabilities Center

Establishing JFCOM as the joint doctrine and capabilities center would provide DoD a single location where the body of joint knowledge could be analyzed and transformed into doctrine and required capabilities. JFCOM provides the most likely place for this to occur. They are the joint force integrator and trainer, already work closely with the service requirements' centers, and also serve as the executive agent for joint experimentation.[70] Furthermore, the SecDef has empowered them to be the focal point for gathering lessons learned from the most recent conflicts, thus testifying to the importance he places on gathering a truly joint perspective of future requirements.[71]

JFCOM could blend these lessons learned from the recent conflicts into a guiding vision of future requirements, and then allow the services to compete in defining and fielding the solution

sets. These solution sets would be reviewed and validated by the JCB and JROC prior to acquisition, thus helping to ensure their proper synchronization with other service and joint requirements. Providing JFCOM a formal seat in the JROC would help level the playing field, as this would make interoperability an equal voice to the services'.

To further strengthen JFCOM's ability to impartially validate joint requirements, the FCB leads residing on the JS could be transferred to JFCOM. These FCBs provide the analysis of the capabilities required by the services and the joint force, and they play an important role in helping ensure these capabilities interoperate across the services.

JFCOM would become responsible for ensuring service and joint requirements meet joint interoperability standards. This would continue the trend of pushing jointness down the procurement chain for resolution prior to the JROC validation and DAB acquisition processes. Integrating the separate service component commands that currently help develop joint doctrine and capabilities more directly into JFCOM would further facilitate this.

Air Combat Command (ACC) and Fleet Forces Command (FFC) serve as JFCOM's Air Force and Navy component commands respectively, and they help determine the Air Force's tactical fighter requirements and the Navy's ship requirements. These commands could be expanded to look more holistically at global requirements to help resource all air and naval forces and capabilities.

Likewise, the Army Training and Doctrine Command (TRADOC) and the Marine Corps Combat Development Command (MCCDC) develop Army and Marine Corps requirements respectively. Portions of these commands could be more fully integrated with JFCOM to foster interoperability not just between all land and littoral forces, but also among all of the forces and capabilities.

As joint concepts mature through experimentation, the potential exists within this context for JFCOM to develop the derivative joint architectures. These architectures provide the soundest basis for identifying and defining the joint capabilities needed by the entire joint force. Identifying such capabilities at the start of the service acquisition process would enable requirements to be born joint, and this would break the cycle of constantly applying fixes to solve interoperability shortcomings on fielded systems.

The primary advantages of empowering JFCOM with the FCBs and doctrine and requirements' commands lie in creating standing and dedicated analysts under a joint command to manage each capability area. This creates a more impartial forum to test and advance the solution sets. In Washington these are often run like pickup teams where the services participate when they have something at stake, and the context is far from impartial.[72] JFCOM,

working with their service component doctrine and capability commands, would increase the credibility of the analysis and would serve as the proponent of the joint standards each solution set must meet.

This is currently missing from the separate service approaches, and does not appear to be forthcoming in the JCIDS process. As the services advance optimum solutions that meet joint standards, they would be programmed and then procured within the current PPBE and service processes in place.[73]

JFCOM provides a level of impartiality in developing joint requirements since it is a joint headquarters, but there are some risks that need to be addressed. First, it is not clear this process will fully prevent continued domination by service interests. Each of the key players retains an effective means for articulating their institutional interests. To overcome this JFCOM will need some control of the subordinate force development commands, but this may inadvertently undermine the authority of the Service Chiefs and Staffs that largely control those commands. The tension created by this may not be totally healthy and could generate unforeseen consequences.

To offset this JFCOM's role should be circumscribed to developing and validating the joint doctrine and required capabilities only, leaving the services to compete for the solution sets. This would retain a healthy competition of ideas while still operating from common requirements set by JFCOM and its subordinate service capabilities centers. Lastly, it is not clear JFCOM would articulate combatant command requirements better than the services currently do, but integrating joint lessons learned and service doctrine and capabilities centers provides more effective and impartial joint oversight than the current system. For these reasons, then, this solution may well be worth embracing.

OPCON of Service Acquisition Accounts

Providing JFCOM OPCON authority over service acquisition accounts would dramatically strengthen their ability to enforce interoperability among procurement programs, but it comes with significant consequences – consequences that may make the cure worse than the problem. With this authority and the one above, JFCOM would become responsible for establishing the requirements, seeking approval from the JROC and DAB to procure them, and then overseeing the resourcing and fielding to the combatant commands and services. This creates a one-stop-shopping center, but may stifle the competition of ideas and desynchronize equipping from the other service Title 10 activities.

First, let us examine how this would work. Giving OPCON authority over acquisition accounts may, at first sight, strengthen joint interoperability, because it introduces a new enforcement mechanism to oversee and control program execution. Such authority could be structured either of two ways. JFCOM could have OPCON over how each service spends its acquisition dollars, or a more radical approach would provide OPCON over the Department's entire acquisition budget. In the former case, JFCOM would effectively have veto authority over how service dollars get spent within this functional area, while the more radical approach would provide authority to transfer money across the services to meet the requirements and interoperability priorities JFCOM establishes.

In either case JFCOM serves as an enforcement mechanism ensuring service PEs meet interoperability standards before they spend their program dollars. Under the second option, they can also redirect program dollars from the least promising programs to other programs in that service or even to the other services'.

This is strong medicine, but separating the equipping function from the other service Title 10 functions of recruiting, organizing, training, etc., presents a significant problem. JFCOM would have authority to direct solution sets without being responsible for developing or synchronizing the other critical functions preformed by the services. This would generate problematic tensions, as the services would constantly be reacting to external requirements that they cannot control.

The services continue to play an indispensable role in developing and executing coherent and integrated budgets, and balancing Title 10 requirements with CoCom requirements is a core capability they each have. Providing this OPCON authority over acquisition accounts without an ability to maintain the equipment or make the requisite organizational and training changes necessary as they develop and field new requirements and capabilities would likely create unmanageable tension between JFCOM and the services. This solution unhinges Title 10 relationships and is not likely to succeed. Furthermore, giving all of these Title 10 authorities to JFCOM would seem to be very premature indeed. For these reasons this solution should be rejected.

EMPOWERING OTHER COMBATANT COMMANDS

Empowering the combatant commands, who are after all the primary users of joint capabilities, with a stronger means of articulating their requirements makes good sense. OSD could achieve this by providing them greater budgeting authority, a stronger voice in the requirements determination process, or by empowering functional commands to develop

requirements within their functional domains. These approaches recognize and correct the problem the DSB highlights when it states,

> "The business of the combatant commands is the Department's core business and the inability to relate resource allocations to core business should be regarded as a fundamental failure in how DoD understands its own business."[74]

Budgeting Authority

The DSB recommends allocating the budgets to the combatant commands by building a multi-year matrix that links each command's mission capabilities to the defense resources it receives. This provides combatant commands the information necessary to make credible choices as part of their input to the force programming process. The matrix provides estimates of what each command requires to annually sustain its assigned and attached forces (using empirical allocations from a 5-year running average), required theater infrastructure costs, acquisition program costs, etc. With this data, CoComs could more directly influence service and department level programming choices.[75]

It is not clear that providing this budgeting authority would improve the process. On the one hand there is little evidence they want such authority, nor is there evidence they would be more capable of performing it than the services. As one former EUCOM commander told me, "I had 93 countries to deal with, and to think I could squeeze more time into the day to make programming decisions in addition to handling this mission is ridiculous; that's what I rely on the services to do."

Additionally, they are not resourced to execute this function, and even if the estimated 650 additional spaces each command would need could be found,[76] there is good reason to believe the net result would likely increase interoperability problems rather than reduce them. This is particularly true as each command could establish and resource their own requirements, and as forces are required from across the CoComs for surge missions as those currently underway in Afghanistan and Iraq, the interoperability problems could be overwhelming.

Those who cite SOCOM as an example of success within this area overlook several key differences. First, their procurement authority is relatively modest when compared to the services overall. Second, the number of forces they outfit is similarly small when compared to those assigned to most of the other CoComs.[77] Furthermore, once special operating forces are employed with conventional forces, the interoperability problems these elements experience becomes proportionately more complex. Due to the small number of forces involved and the highly specialized nature of their missions, commanders manage to develop workarounds to these challenges.

But this hardly makes it a model for procuring interoperable equipment. The differing regional and functional views of the nine combatant commands, coupled with their authority to make budgeting choices would likely increase the interoperability problems. To offset this an overarching system would need to be created to ensure interoperability among all of the CoComs, and this is where our attention should be focused.

Overall, this proposal increases the problem vice resolving it. It is not a very stable means of conducting PPBE as command structures change almost yearly, and the process is very complicated and might generate significant unintended consequences by greatly empowering the CoComs. It would be difficult to balance the competing interests of each of these CoComs, which is a useful service the services currently provide. For these reasons providing budgeting authority to the combatant commands should be rejected.

A Stronger Voice in Determining Requirements

Allowing the combatant commands a stronger voice in the requirements generation process produces benefits the current system lacks. A modest means of achieving this would be to resource combatant commands with a J-8 office capable of conducting a more rigorous planning and programming function for that command than the current structure offers. Each CoCom could also have an associated office in the Pentagon to formally advocate each command's requirements throughout the Washington centered PPBE cycle. Representatives from these offices would also serve as members of the Mid-Level Review Board, attend relevant SLRG meetings, etc. This would enable the commands to voice their requirements throughout the process vice only at the end as the current Integrated Priority List (IPL) process allows.

There are legitimate concerns this would detract from the combatant command's primary responsibility of protecting and promoting national security interests in his region, but his role in setting requirements would be very limited. It would be designed to give him only enough structure to produce the analysis necessary to have a more effective voice than offered by the current IPL process. The office would provide the means for articulating his near and far-term joint capability needs. It would produce the analysis to justify current and projected shortfalls, offer offsets, and invite competition among the services in meeting those capability gaps.

The J-8s would work more directly with the service headquarters, and in this manner they would get a stronger voice in stating their needs without getting encumbered in the entire process of developing or funding the solutions. This would be a major improvement over the current system where their IPLs get reviewed at the end of the process when limited trade-offs can be made.

Another concern is this process adds many new voices to the requirements determination process and makes the subsequent prioritization among programs and needs more difficult. But working the CoComs' input throughout the PPBE process vice the current system where it is taken at the end could offset this. In this manner the services would have ample opportunity to achieve commonality among CoCom priorities and address outlying deficiencies while still maintaining interoperability standards across all CoComs.

Finding the means to allow the primary users of service provided forces and capabilities a larger say in establishing the requirements is important, as they have the greatest stake in their preparedness to meet unforeseen challenges. The CoCom voices need to be strengthened throughout the requirements generation process without detracting from their primary mission, and DoD could achieve this by resourcing an appropriate level of structure within each command to oversee this function. For these reasons the CoComs should receive the organizational capacity to achieve a stronger voice in the requirements determination process.

Functional Combatant Commands Develop Joint Requirements

A final option would be to empower the functional combatant commands to develop and resource the joint requirements within their areas of influence. For example, STRATCOM would develop the requirements needed for its mission; SOCOM would develop all of those for its mission, TRANSCOM would do so for its mission, and JFCOM for the rest of the joint force. These requirements would still have to be integrated at the JROC level, but establishing functional executive agents for requirements would provide the authority to identify and develop interoperable requirements by mission area.

Organizing requirements by mission area across all of the services is at first sight appealing. This proposal limits the numbers who voice requirements from the 9 combatant commands in the above proposal to the 4 functional commands who have equal potential to provide a joint view of requirements within their mission area. As an example, TRANSCOM could articulate air, sea and ground transportation requirements based upon the other CoCom's mission requirements, and this would help ensure interoperability among all transportation systems as they would be designed and fielded jointly. Similar processes could be established for the other functional commands within their capability domains.

Of course each of these commands would have to be resourced to perform this added task, but this would not resolve the conflict that exists between performing their real world near-term mission and generating a long-term view of future requirements. Empowering each of them with this responsibility is similar to the EUCOM dilemma discussed earlier, as they are involved

in daily execution now and don't have the time to do it. They need the services to develop and field their forces.

Achieving interoperability among all of the forces would also be problematic, since each functional command would articulate and program toward their own view of future requirements. In fact, this proposal differs little from providing the CoComs budgeting authority as it is encumbered with the same attendant problems of resourcing each of these commands to perform this function and of achieving interoperability across all CoComs after fielding the forces. At the end of the day, the military departments still provide the most effective means for creating coherent programs and fielding forces. For these reasons there seems to be little efficiency gained in this option at this time, and should be rejected for now.

ESTABLISHING NEW JOINT ENTITIES

Establishing new joint entities within single or selected capability domains provides the most radical solution to achieving interoperable joint capabilities. The C2 domain provides the most pressing case for taking such an approach, as this domain virtually requires an enterprise-wide approach in meeting the C2 requirements of the entire joint force. For the C2 element, this could be accomplished in either of two ways.

A DSB recommendation calls for establishing a small Joint C2, Networks and Information Integration Systems Command (with control over key acquisition programs) in JFCOM with dual-hatted service components to provide systems engineering support to CoComs. This systems command would have control of budget line items in order to synchronize systems acquisition and resolve interoperability challenges, but acquisition programs would continue to be executed by the services and defense agencies.[78]

A related option advanced by the Center for Strategic and International Studies (CSIS) Beyond Goldwater-Nichols Study Group would convert the J-6 into the core of a joint task force with budgetary and acquisition authority for Joint C2. It would report to the SecDef through a new Under Secretary for C3I to provide policy oversight and advocacy in the resource allocation process. The responsibility and associated PEs would pass from the services to the new joint C2 task force, and it would be headed by a 3-star and be augmented by appropriate elements from DISA. [79]

This approach recognizes the enterprise-wide nature of C3I and consolidates service requirements under one office, much as consolidating the formulation of all joint requirements under JFCOM does. CSIS recognizes that it will be "difficult to draw the boundary between the 'core' C2 functions that will be the responsibility of the new joint C2 task force and the C2

interfaces and applications that will remain the responsibilities of the services…but believes that true interoperability in Joint C2 will not be achieved until it is bought jointly."[80]

But why stop with the C2 function. A more aggressive solution would be to reorganize all of the various service RDA elements into stand alone joint entities aligned to the FCBs, and empower them with budgeting authority as well. Such entities could direct the procurement of particular capabilities within their domains (e.g., battlefield awareness, force application, logistics, etc.) while still allowing the services to execute the actual acquisition program. Other nations have tried such an approach and found success.

The United Kingdom grappled with challenges similar to ours and sought to create an integrated process to link strategy and requirements with resourcing and programming decisions among their services. Their Strategic Defence Review published in 1998 concluded that their equipment planning and procurement structure was inefficient and focused too much on individual service needs vice joint military capabilities. Consequently, they established a new structure organized around joint capability areas managed by a new Deputy Chief of Defence Staff (Equipment Capability) who has overall responsibility for requirements, programming and budgeting.[81]

He had four deputies who were capability managers for maneuver, strike, strategic deployment and information superiority. These have been subsequently reduced to three and now comprise maneuver, precision attack, and information superiority. These capability areas take their guidance from the defense planning assumptions, operational mission requirements, and a high level operational concept written by their joint concepts and doctrine center. This process, in effect, allows for the formulation of joint requirements within particular areas and allows a single entity to integrate them. It also allows a single entity to organize the procurement program and budget the funds prior to service review and approval by the Defence Management Board and Chiefs of Staff.

They do work closely with the services to identify the right capabilities and establish schedules to deliver defined levels of capability, but they have the authority to make the trade-offs between requirements, budgets, and equipment performance levels. They are also moving toward placing all of the Doctrine, Organization, Training, Material, Leadership and Education, Personnel, and Facilities (DOTLMPF) requirements under this command as well.[82] These responsibilities give them unprecedented authority compared to the changes currently being considered by DoD, but their system benefits from several aspects that may not be transferable to ours.

First, their force structure, budget and resources are a fraction of ours.[83] This allows more intense management and leaves far less room for redundancies. Secondly, promotion within their system is significantly more dependant on joint experience as their headquarters and operational commands are more joint than ours. These combine in a manner that requires increased visibility of joint needs and solutions, and has resulted in a more streamlined and effective procurement process that might translate poorly to ours.

Third, it is not clear such a system would function effectively within the US given the major roles that the defense industry, contractors, and the Congress play in our system. These factors dramatically influence our choices and increase redundancies.

This system might force the services to procure joint and interoperable capabilities and lead to a more coherent joint acquisition process, but we would likely need to remove the entire DOTMLPF process from the services to achieve the coherency required. Without this these entities would interfere with the services' ability to produce synchronized and coherent budgets and programs across all of their Title 10 activities. It also begins to undermine service identities, and this may develop significant unforeseen consequences. Nevertheless, this radical approach has merit and should be reserved as a final option if other recommended changes fail to deliver the interoperability required.

CONCLUSIONS AND RECOMMENDATIONS

The JROC has struggled to find effective metrics and enforcement mechanisms to assess interoperability and limit parochial interests while still fostering competition, innovation and change among the services. It is organized similar to a corporate board, but has not always performed as one despite its successive attempts to improve its analysis and enforcement mechanisms. The recently developed JOpsC family of concepts and the new JCIDS process with re-tooled FCBs continue to improve the metrics and processes to assess service programs, and the JBMC2 Board and expanded role for JFCOM's in requirements determination also provides an additional joint perspectives previously lacking.

These efforts are certainly helping to move jointness into the equipping function, but it is too early to tell if they will fully resolve this long-standing and seemingly intractable problem. If they fall short, as much of the earlier analysis indicates, the joint force will need to take additional steps to develop the organizational capacity to fully resolve joint interoperability challenges. These steps should be made while recognizing the intrinsic value the services continue to offer in providing coherent budgets and force development programs that have fielded the most lethal and versatile combat force and associated capabilities ever known to the

world. Over the longer term, even service roles may change, but the following actions should be taken now to improve interoperability.

First, the joint force must have an overarching vision of how it will operate 15 to 20 years in the future. The current family of concepts is written too broadly to provide this. The concept must provide the detail necessary to derive the attributes and characteristics the joint force would need to succeed in future conflicts. Such a capstone document would provide the “aha” idea of how the force operates that becomes the architectural basis the services can program towards. This conception of future warfare will provide coherency among service programs, because it establishes the very interoperability requirements needed to leverage the joint arms. The JROC needs to view requirements through such a prism to achieve the interoperability and coherency needed among service programs.

Second, OSD must improve its strategic oversight and directive guidance. This must remain the start point for measuring and monitoring service procurement initiatives. The enhanced planning process will enhance this effort, but rigor needs to be enforced during program development and execution to ensure combatant command requirements are met. OSD can achieve this by translating the “aha” idea into specific programming guidance complete with metrics to monitor compliance. This would provide a basis for making the tough trade-offs currently avoided through the broad, overarching guidance documents currently in use in DoD.

Third, the combatant commands must have a stronger voice in determining future requirements. They must be better resourced to articulate joint capability gaps and justify the shortfalls and offsets needed. Providing them J-8 offices with a representational office in Washington would create stronger articulation and competition among joint solution sets than the current service-centric process produces. The combatant commands are the primary consumer in the defense department and must have a more viable means to articulate longer-term requirements.

Lastly, JFCOM must play a more central role in establishing the interoperability standards the services must achieve. As the joint force integrator, JFCOM’s component commands must include the portion of service doctrine and capabilities centers that deal with joint issues. This will provide a more impartial center to develop the requirements and architectures the services can program towards. Additionally, JFCOM must have a permanent seat on the JROC on all PPBE matters so interoperability will receive equal billing whenever the services propose solutions to existing capability gaps.

Together these efforts should provide a clear vision to program towards, appropriate guidance and oversight from OSD with informed input from the combatant commands, and a credible joint force integrator with the tools to provide informed analysis of capability needs with an equal voice on interoperability issues.

If these options fail, DoD will have little choice but to establish new joint entities with complete Title 10 authority across DOTMLPF within specific functional domains. These entities would be responsible for meeting the requirements of combatant commands within each of their particular capability domains. This system, similar to the UK model, would obviate the need for separate service procurement authorities. The unforeseen consequences of such action, like loosing the cultural identity of the services and their expertise in developing coherently synchronized budgets and programs, makes this highly risky even if it increases jointness. We are not here yet, but may be soon if these other recommendations are not implemented and enforced.

WORD COUNT=11,260

ENDNOTES

[1] On the nature and requirements of command, see Martin Van Creveld, Command in War (Cambridge: Harvard University Press, 1985) 6-10, 41, and 268-270; on importance of unity of command in modern warfare see K. Scott Lawrence, "Joint C2 Through Unity of Command, Joint Forces Quarterly, No 26, Autumn/Winter 1994-95, 107-109; for the achievements in this area due to GNA, see James R. Locher III, Victory on the Potomac, (College Station, TX: Texas A&M University Press, 2002) 440.

[2] See General Tommy Franks, Prepared Testimony before the HASC, July 10, 2003; and Sandra I. Erwin, "Close Air Support Tactics Sharpened in Iraq - Despite Recent Success, Improvements Still Needed in Equipment and Training," National Defense, June 2003; and K.L. Vantran, "Power of Jointness Among Lessons Learned in Operation Iraqi Freedom," American Forces Press, October 3, 2003.

[3] See Stephen Trimble, "JROC Takes More Active Role in Acquisition Process," Aerospace Daily, January 24, 2003; and Amy Butler, "First Draft of New FY'06 'Strategic Planning Guidance' Circulated in DoD," Defense Daily, November 7, 2003, 3.

[4] Leslie Lewis, Roger Allen Brown, and Charles Robert Roll, Service Responses to the Emergence of Joint Decisionmaking (Rand Report: MR-1438-AF, 2001) 5-8.

[5] For a topical example of this, see briefing provided by a Senior Defense Official, "Background Briefing on the Defense Planning Guidance," Defense Link, May 10, 2002.

[6] Leslie Lewis, Roger Allen Brown, and Charles Robert Roll, Service Responses to the Emergence of Joint Decisionmaking (Rand Report: MR-1438-AF, 2001) 28-31.

[7] Defense Adaptive Red Team, DART Review of Joint Operating Concepts and Joint Functional Concepts, Findings from Concept Review Workshop 30 Sep-2 Oct 2003 (Arlington, VA: Hicks and Associates, Inc., 2003) 4-16.

[8] Major General Robert H. Scales, Jr. USA (Ret), Yellow Smoke, The Future of Land Warfare for America's Military, (Lanham, MD: Rowman and Littlefield Publishing, Inc., 2003) 164-166.

[9] William A. Owens and James R. Blaker, "Overseeing Cross-Service Trade Offs," Joint Forces Quarterly, Autumn 1996, 40.

[10] Leslie Lewis, Roger Allen Brown, and Charles Robert Roll, Service Responses to the Emergence of Joint Decisionmaking (Rand Report: MR-1438-AF, 2001) x - xi.

[11] See findings and recommendations from the Department of Defense, Defense Science Board Summer Study, 1983.

[12] For more detailed descriptions see Center for Strategic and International Studies Report, "Toward a More Effective Defense," 1985; and the Senate Armed Services Committee Staff

Study Recommendations, “Defense Organization: The Need for Change,” 1985; and President’s Blue Ribbon Commission on Defense (Packard Commission), 1986.

[13] JCSM-159-87, Subject: Joint Requirements Oversight Council, Revision of Joint Requirements and Management Board Charter (Appendix), 17 Sep 1987.

[14] Christopher A. Waln, LtCol, USAF, “Organization of Joint Chiefs of Staff and Systems Acquisition: What Now/What Next,” Program Manager, (July-August 1988): 3

[15] Goldwater-Nichols Department of Defense Reorganization Act of 1986, 10 U.S. Code, sec. 153 (1986).

[16] Duties of the Vice Chairman, Joint Chiefs of Staff were proposed to SecDef under CM-660-87, 6 Apr 87 and approved under return correspondence provided by SecDef on 15 Apr 1987; JROC Charter was included in Memorandum to SecDef under JCSM-159-87, 17 Sep 87 and subsequently circulated under JCS 202/235 following JCS approval, 21 Sep 1987.

[17] Office of the Vice Chairman of the Joint Chiefs of Staff, JROC: Planning in a Revolutionary Era, 1996, 7.

[18] JROC Charter, JCS 202/235, 21 Sep 1987, Appendix to Enclosure A.

[19] See JROC Charter, Enclosure A to JCSM-159-87, Revision of the Joint Requirements and Management Board Charter, 17 Sep 87; and Office of the Vice Chairman of the Joint Chiefs of Staff, JROC: Planning in a Revolutionary Era, 1996, 8-9.

[20] Ibid. 12.

[21] William A. Owens, “JROC: Harnessing the Revolution in Military Affairs,” Joint Forces Quarterly (Summer 1994) 56.

[22] Robert Holzer and Neil Munro, Joint Staff Plans Broad Review, Defense News , April 11-17, 1994, 28.

[23] Admiral William A. Owens, Statement Before the Committee on Armed Services, United States Senate, February 28, 1996, 2.

[24] William A. Owens and James R. Blaker, “Overseeing Cross-Service Trade Offs,” Joint Forces Quarterly, Autumn 1996, 38.

[25] Owens, Admiral William A. "Emerging System of Systems." Military Review (May-June 95): 15-19.

[26] Admiral William A. Owens, Statement Before the Committee on Armed Services, United States Senate, February 28, 1996, 2-4.

[27] See Tony Capaccio, "Former JCS Vice Chief: Pentagon Well Behind on Jointness," Defense Week, December 9, 1996; and on retrenchment see Robert Holzer, "Is JROC Poised to Seize Power?" Defense News, December 9-15, 1996.

[28] See William Matthews and Patrick Pexton, "Frustrated, Adm. Owens Announces Retirement," in Army Times and William Matthews "An Innovator Calls It Quits," in Navy Times (11 Mar 1996) 3 and 32 respectively.

[29] National Defense Authorization Act of 1996, 10 U.S. Code, sec. 181 (1996).

[30] See General Tommy Franks, Prepared Testimony before the HASC, July 10, 2003; and Sandra I. Erwin, "Close Air Support Tactics Sharpened in Iraq - Despite Recent Success, Improvements Still Needed in Equipment and Training," National Defense, June 2003; and K.L. Vantran, "Power of Jointness Among Lessons Learned in Operation Iraqi Freedom," American Forces Press, October 3, 2003.

[31] CJCSI 5123.01A, Charter of the Joint Requirements Oversight Council, 8 March 2001, A-1 and A-3 thru A-8.

[32] See Special Inside the Pentagon Interview with JCS Vice Chair, "Herres Eyes Acquisition Fixes, to Delay 'New Starts" Beyond Milestone Zero," Inside the Pentagon, October 14, 1988; and the transcript of his Corona speech on November 6, 1987 where he states, "The JROC is now chartered to provide program oversight at the front end of the acquisition process to determine joint program feasibility – the emphasis is on fulfilling the CinC's requirements while ensuring interoperability, reducing parallel and duplicative efforts, and promoting economies of scale. With this in mind, I intend to move JROC deliberations upstream toward milestone zero to impact concepts as they develop rather than adjust programs as they are executed."

[33] See JROC Charters JCSM-159-87, 17 Sep 87; CM-2132-89, 17 Aug 89.

[34] See JROC Charter MCM-178-90, 14 Sep 90.

[35] House Armed Services Committee Report on H.R. 4739, National Defense Authorization Act for Fiscal Year 1991, July 31, 1990.

[36] See JROC Charters MCM-76-92, 19 May 1992 and MCM-14-95, 7 Feb 1995; also see original CJCSI 3137.01 on JWCA Process.

[37] For assessment of CPA impact see Owens and Blaker, "Overseeing Cross-Service Trade Offs," JFQ, Autumn 1996, 39.

[38] See JROC Charters CJCSI 5123.01, 2 May 1997 and CJCSI 5123.01A, 8 Mar 2001.

[39] Kerry Gildea, "Pace Calls for More Proactive JROC Process," Defense Daily, 10 Apr 2002.

[40] See Thom Shanker, “Rumsfeld Sees Discord on Size of Military,” New York Times , 19 Jul 2001; and Thom Shanker, “Peacetime Battle,” New York Times , 30 Jul 2001; for detailed description of the new strategy see Department of Defense, Quadrennial Defense Review Report, 30 Sep 2001.

[41] Sharon Weinberger, “Rumsfeld Wants Weapons Judged by Joint Operations,” Aerospace Daily, August 22, 2002; and Lorenzo Cortes, “Pace Asserts JROC’s Importance in Developing CONOPS,” Defense Daily, January 24, 2003.

[42] Department of Defense, Joint Operations Concepts , JCS Version 1.0 for 2003, 3 Oct 03; for a description of how the JOpsC serves as a foundational document requiring annual updates see GEN Peter Pace, VCJCS, Testimony before Senate Armed Services Committee, 4 Feb 04, 16-17.

[43] Interviews with selected JS action officers responsible for developing the document, Washington DC, Jun 2003.

[44] See Department of Defense, Joint Operations Concepts , JCS Version 1.0 for 2003, 3 Oct 03, Chapter 3.

[45] Defense Adaptive Red Team, DART Review of Joint Operating Concepts and Joint Functional Concepts, Findings from Concept Review Workshop 30 Sep-2 Oct 2003 (Arlington, VA: Hicks and Associates, Inc., 2003) 16.

[46] GEN Peter Pace, VCJCS, Testimony before Senate Armed Services Committee, 4 Feb 04, 16-17.

[47] See CJCSI 5123.01A, Charter of the Joint Requirements Oversight Council, 8 Mar 01; and Draft CJCSI 5123.01B, Charter of the Joint Requirements Oversight Council, xx Oct 03.

[48] Mr. Edward C. "Pete" Aldridge, Jr., Under Secretary of Defense for Acquisition, Technology and Logistics -- House Armed Services Committee hearing on Fiscal Year 2004 Acquisition, Program, Budget and Policy Issues, 1 Apr 2003.

[49] See http://acc.dau.mil/simplify/ev.php?ID=8145_201&ID2=DO_TOPIC for copy of DJSM-0921-02 Memorandum For Distribution, Changes to the Requirements Generation System (3170), 7 Oct 02.

[50] See Department of Defense Directive 5000.1, the Defense Acquisition System , 12 May 2003; and CJCSI 3170.01C, Joint Capabilities Integration and Development System , 24 Jun 2003.

[51] For more thorough descriptions of these processes including the role of the gatekeeper, see parallel documents Department of Defense Directive 5000.2, Operation of the Defense Acquisition System , 12 May 2003 and CJCSM 3170.01, Operation of the Joint Capabilities Integration and Development System , 24 Jun 2003.

[52] CJCSI 3170.01C, Joint Capabilities Integration and Development System , 24 Jun 2003, A-6.

[53] Department of Defense, Joint Defense Capabilities Study, Improving DoD Strategic Planning, Resourcing and Execution to Satisfy Joint Capabilities , Final Report January 2004.

[54] Ibid. Appendix B, Decision Briefing to Senior Leader Review Group, 31 Oct 03 and SecDef Memo to Military Departments, 31 Oct 03, Subject: Initiation of Joint Capabilities Development Process.

[55] Ibid. B-17.

[56] See SecDef Memo to Military Departments, 31 Oct 03, Subject: Initiation of Joint Capabilities Development Process where he essentially establishes 3 or 4 co-leads to implement this process without organizational changes to support them.

[57] ADM Giambastiani, USN, CDR JFCOM, Testimony before the Senate Armed Services Committee, 14 March, 2003.

[58] Brig Gen Marc Rogers, USAF, Testimony before the House Armed Services Committee, 21 October, 2003.

[59] These JROC designations of FCB leads were based upon verbal decisions originating in JROC sessions dating back to May 2003.

[60] See Defense Adaptive Red Team, DART Review of Joint Operating Concepts and Joint Functional Concepts, Findings from Concept Review Workshop 30 Sep-2 Oct 2003 (Arlington, VA: Hicks and Associates, Inc., 2003) 4, 8, 10, & 16; and GEN Peter Pace, VCJCS, Testimony before Senate Armed Services Committee, 4 Feb 04, 16-17.

[61] COL David A. Fastabend, "That Elusive Operational Concept," ARMY Magazine Vol. 51, No 6 (June 2001) 1-4.

[62] Ibid. 3.

[63] For a description of training methodologies implemented after AirLand Battle doctrine see Department of the Army FM 25-100, Training the Force , 15 November 1988; for organization, equipment and logistic implications for Army and Air Forces see John L Romjue, "The Evolution of the Airland Battle Concept," Air University Press, May-Jun 1984 and TRADOC Pamphlet 525-5, Military Operations: Operational Concepts for the AirLand Battle and Corps Operations – 1986, 25 March 1981and Major J. M. Meiterle, "Theater Warfare: Can the AirLand Battle Succeed Without Close Air Support?" CSC 1988.

[64] Defense Adaptive Red Team, DART Review of Joint Operating Concepts and Joint Functional Concepts, Findings from Concept Review Workshop 30 Sep-2 Oct 2003 (Arlington, VA: Hicks and Associates, Inc., 2003) 12-14.

[65] Amy Butler, "First Draft of New FY'06 'Strategic Planning Guidance' Circulated in DoD," Defense Daily, November 7, 2003.

[66] Interviews with selected joint staff officers writing and staffing the draft National Military Strategy and Joint Vision update.

[67] National Defense Authorization Act of FY 2004 and selected statements from the interviewees above.

[68] See briefing from Senior Defense Official, "Background Briefing on the Defense Planning Guidance," Defense Link, May 10, 2002.

[69] SecDef Memo to Military Departments, 31 Oct 03, Subj: Initiation of Joint Capabilities Development Process.

[70] For Joint Forces Command missions, see United States Government, Unified Command Plan, 1 Oct 2002 and CJCSI 3010.02A, Joint Vision Implementation Master Plan (JIMP), 15 Apr 2001; for relationships with Service doctrine and requirements' centers, see JFCOM J-9 website at http://www.jfcom.mil/about/abt_j9.htm.

[71] ADM Giambastiani, USN, CDR USJFCOM and SAC Transformation (NATO), Statement before the House Armed Services Committee, 2 Oct 2003.

[72] Interview with FCB members from the Service staffs, 10 Feb 04.

[73] Department of Defense, Management Initiative Decision (MID 913), 22 May 2003, replaced the PPBS with the Planning, Programming, Budgeting, and Execution (PPBE) process beginning with the FY 2005 cycle.

[74] USD (AT&L), Report of the Defense Science Board Task Force, Enabling Joint Force Capabilities, August 2003, 17.

[75] Ibid., 17-18.

[76] The number of spaces needed is a JFCOM estimate based upon comparison with the structure SOCOM uses for its acquisition mission.

[77] US Code, Title 10, Sec 162 and Department of Defense ForcesFor Combatant Commands.

[78] USD (AT&L), Report of the Defense Science Board Task Force, Enabling Joint Force Capabilities, August 2003, 13-15.

[79] Center for Strategic and International Studies, Beyond Goldwater-Nichols: Defense Reform for a New Strategic Era, Washington DC, 18 Mar 2004, 8, 47-50.

[80] Ibid. 49.

[81] See United Kingdom Ministry of Defence, http://www.mod.uk/aboutus/omd/procurement.htm

[82] Interview with the Deputy Chief of Defence Staff (Equipment Capability), Lieutenant General Fulford, 19 Nov 2003.

[83] For FY02 the UK budget for defense was $38.4B vice $350.7B for US; with supplemental appropriation US spent $426.9B. For comparison among all NATO countries see UK Management of Defence website at: http://www.armedforces.co.uk/mod/listings/l0012.html.

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